

10 Assessment

10.1 Standards

The Board of Studies *K–10 Curriculum Framework* is a standards-referenced framework that describes, through syllabuses and other documents, the expected learning outcomes for students.

Standards in the framework consist of two interrelated elements:

- outcomes and content in syllabuses showing what is to be learned
- descriptions of levels of achievement of that learning.

Exemplar tasks and student work samples help to elaborate standards.

Syllabus outcomes in Mathematics contribute to a developmental sequence in which students are challenged to acquire new knowledge, understanding and skills.

The standards are typically written for two years of schooling and set high, but realistic, expectations of the quality of learning to be achieved by the end of Years 2, 4, 6, 8 and 10.

Using standards to improve learning

Teachers use standards in Mathematics as a reference point for planning teaching and learning programs as well as for assessing and reporting student progress. Standards in Mathematics help teachers and students to set targets, monitor achievement, and, as a result, make changes to programs and strategies to support and improve each student's progress.

10.2 Assessment for learning

Assessment for learning is designed to enhance teaching and improve student learning. It gives students opportunities to produce work that leads to development of their knowledge, understanding and skills. Teachers decide how and when to assess student achievement, as they plan the work students will do, using a range of appropriate assessment strategies including self-assessment and peer assessment.

Teachers of Mathematics provide students with opportunities in the context of everyday classroom activities, as well as planned assessment events, to demonstrate their learning.

In summary, *assessment for learning*:

- is an essential and integrated part of teaching and learning
- reflects a belief that all students can improve
- involves setting learning goals with students to encourage growth and development
- involves students in self-assessment and peer assessment
- provides feedback that helps students understand the next steps in learning and plan how to achieve them
- involves teachers, students and parents reflecting on assessment data.

Quality assessment practices

Effective *assessment for learning* informs teachers and students about past, present and future learning. The quality of assessment practices and materials can be judged using the following *assessment for learning* principles. The following *assessment for learning* principles provide the criteria for judging the quality of assessment materials and practices.

Assessment for learning principles

Assessment for learning:

- promotes learning by emphasising the interactions between learning and manageable assessment strategies
 - teachers reflect on the purposes of assessment and on their assessment strategies
 - assessment activities allow for demonstration of learning outcomes
 - assessment is embedded in learning activities and informs the planning of future learning activities
 - teachers use assessment to identify what a student can already do
- clearly expresses the goals of the learning activity
 - students know and understand the learning goals and the criteria that will be applied to judge the quality of their achievement
 - students receive feedback that helps them make further progress
- helps students learn better, rather than just achieve a better mark
 - assessment is an integral component of the teaching–learning process rather than a separate activity
 - teachers design and select tasks that assess, and therefore encourage, deeper learning
 - feedback motivates the learner and helps students to understand that engagement with feedback can lead to improvement
- provides meaningful and constructive feedback
 - feedback is directed to the achievement of standards and away from comparisons with peers
 - feedback is clear about strengths and areas for further development
 - feedback is individualised and provides strategies for improvement
- encourages students to take responsibility for their own learning
 - assessment includes strategies for self-assessment and peer assessment, emphasising the next steps needed for further learning
- is inclusive of all learners
 - assessment against standards provides opportunities for the diverse range of learners to achieve their best
 - assessment activities are accessible and free of bias.

10.3 Assessment for students with special education needs

Some students with special education needs will require adjustments to assessment practices in order to demonstrate what they know and can do in relation to syllabus outcomes and content. These may be:

- adjustments to the assessment process, for example additional time, rest breaks, quieter conditions, or the use of a reader and/or scribe or specific technology
- adjustments to assessment tasks, for example rephrasing questions, using simplified language, fewer questions or alternative formats for questions
- alternative formats for responses, for example written point form instead of essays, scaffolded structured responses, short objective questions or multimedia presentations.

Further examples of adjustments to assessment for students with special education needs can be found in Mathematics support material.

Life Skills assessment

Each student undertaking the Mathematics Years 7–10 Life Skills course will study selected outcomes and content. The syllabus outcomes and content form the basis of learning opportunities for students.

Assessment should provide opportunities for students to demonstrate achievement in relation to the outcomes and to apply their knowledge, understanding and skills to a range of situations or environments, including the school and the wider community.

Students may demonstrate achievement in relation to Mathematics Years 7–10 Life Skills outcomes independently, with adjustments, or with support. The type of adjustments and support will vary according to the particular needs of the student and the requirements of the activity.

Further information about the assessment of students undertaking Life Skills outcomes and content can be found in *Life Skills Years 7–10: Advice on Planning, Programming and Assessment*.

10.4 Reporting

Reporting is the process of providing feedback to students, parents and other teachers about student progress.

Teachers use assessment evidence to extend the process of *assessment for learning* into their *assessment of learning*. In a standards-referenced framework teachers make professional judgements about student achievement at key points in the learning cycle. These points may be at the end of a year or stage, when schools may wish to report differentially on the levels of knowledge, understanding and skills demonstrated by students.

Descriptions of student achievement in Mathematics provide schools with a useful tool to report consistent information about student achievement to students and parents, and to the next teacher to help plan the next steps in the learning process.

The A–E grade scale or equivalent provides a common language for reporting by describing observable and measurable features of student achievement at the end of a stage, within the indicative hours of study. Teachers use the descriptions of the standards to make a professional, on-balance judgement, based on available assessment information, to match each student’s achievement to a description. The Common Grade Scale (A–E) or equivalent is used by teachers to report student levels of achievement from Stages 1 to 5.

For students with special education needs, teachers may need to consider, in consultation with their school and sector, the most appropriate method of reporting student achievement. It may be deemed more appropriate for students with special education needs to be reported against outcomes or goals identified through the collaborative curriculum planning process.

10.5 Choosing assessment strategies

The range of assessment strategies should gather information about the depth of students' understanding, the development of skills as well as the extent of content knowledge.

Assessment strategies should allow for flexibility in the design of tasks.

A collaborative approach to assessment develops a shared understanding of syllabus standards and helps teachers make consistent judgements of evidence of student achievement.

When choosing assessment strategies, teachers should consider whether the tasks:

- ensure a variety of types of task that cater for the full range of students
- show a clear relationship between the outcomes, what has been taught and the content being assessed
- inform students about the nature of the task and marking guidelines
- demonstrate validity and reliability, and are free from prejudice, discrimination and stereotyping
- provide constructive feedback about what students are able to do and what they need to do in order to improve their level of performance
- allow opportunities for self-assessment and peer assessment.

Further advice about choosing assessment strategies will be provided in support materials.